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Novak Druce + Quigg, LLP 1300 Eye Street, NW, Suite 1000 Suite 1000, West Tower Washington, DC 20005			GLESSNER, BRIAN E	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,301	Applicant(s) SPORTEL, HEIKO	
	Examiner BRIAN E. GLESSNER	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/26/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following office action is in response to the application filed on July 26, 2006.
Claims 1-25 are pending. Claims 1-25 are rejected as set forth below.

Drawings

Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because figure 3 should be figures 3A and 3B and figure 4 should be figure 4A and 4B because each separate view should have its own figure number associated therewith. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several

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views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. **Therefore, the kink must be shown or the feature(s) canceled from the claim(s).** No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: at page 10, line 26, the specification refers to figure 8. However, there is not a figure 8 in the drawings.

Appropriate correction is required.

Response to Amendment

The examiner would like to point out that new claims 24 and 25 in the preliminary amendment filed with the application do not have the proper status identifiers. These claims should be labeled as "New Claim".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-7, 11, 14-16, 19, 20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Jensen (2006/0272244).

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In regard to claims 1, 2, 4 and 15, Jensen discloses a tower for a wind turbine having an exterior side and an interior side, the tower at least partly comprising prefabricated metal wall parts 3, wherein each wall part comprises an essentially quadrangular portion having an outwardly facing surface in the direction of the exterior of the tower and an inwardly facing surface in the direction of the interior of the tower, said portion having a top edge, a bottom edge, a first side edge and a second side edge, wherein the first side edge is provided with a first flange 6 along at least part of the length of the first side edge, and wherein the second side edge is provided with a second flange 6 along at least part of the length of the second side edge, said first and second flanges of the prefabricated metal wall parts extend toward the interior of the tower and said first and second flanges of adjacent wall parts are attached to each other by fastening means 3.

In regard to claim 5, Jensen discloses the claimed invention, wherein the essentially quadrangular portion of the prefabricated metal wall parts is essentially rectangular wherein the length of the first side edge is approximately equal to the length of the second side edge and wherein the bottom edge is approximately equal to the length of the top edge, or

wherein the essentially quadrangular portion of the prefabricated metal wall parts is essentially trapezoidal wherein the length of the first side edge is approximately equal to the length of the second side and wherein the bottom edge is longer than the top edge, figures 1 and 2.

In regard to claim 6, Jensen discloses the claimed invention, wherein the tower has an essentially annular, horizontal cross-section, figure 5.

In regard to claim 7, Jensen discloses the claimed invention, wherein the essentially quadrangular portion of the respective prefabricated metal wall parts is curved, figures 2 and 5.

In regard to claim 11, Jensen discloses the claimed invention, wherein the prefabricated metal wall parts are steel parts [0001].

In regard to claim 14, Jensen discloses the claimed invention, wherein the tower is provided with stiffening means 9.

In regard to claim 16, Jensen discloses a method for constructing a tower for a wind turbine according to claim 1 at least partly composed of said prefabricated metal wall parts, comprising attaching on prefabricated metal wall part to an adjacent said prefabricated wall part, figures 2-5.

In regard to claim 19, Jensen discloses the basic claimed invention, wherein the first flange of a said prefabricated metal wall part is attached to the second flange of an said adjacent prefabricated metal wall part by fastening means comprising nuts and bolts, figure 3.

In regard to claim 20, Jensen discloses the claimed invention, wherein the tower has an essentially circular, horizontal cross-section, figure 5.

In regard to claim 22, Jensen discloses the claimed invention, wherein the prefabricated metal wall parts are high strength steel parts [0001].

Claims 1, 2, 4-6, 8, 11, 13, 15, 16, 19 and 22 are rejected under 35

U.S.C. 102(b) as being clearly anticipated by Rensch (3,374,593).

In regard to claims 1, 2, 4-6, 8, 11, 13, 15, 16, 19 and 22, Rensch clearly discloses all of the claimed limitations. Said limitations can clearly be seen in figures 2 and 9 of Rensch's patent. The examiner would like to state that although Rensch does not disclose that his tower is used for a wind turbine, this is merely an intended use and adds no structural features to the claims. Therefore, since Rensch's device comprises all of the claimed limitations, it is inherently capable of performing the same functions as applicant's device.

Claims 1, 2, 4-8, 11, 14-16, 19, 20, 24 and 25 are rejected under 35

U.S.C. 102(e) as being clearly anticipated by Silber (2005/0166521).

In regard to claims 1, 2, 4-6, 8, 11, 13, 15, 16, 19 and 22, Rensch clearly discloses all of the claimed limitations. Said limitations can clearly be seen in figures 2 and 9 of Rensch's patent. The examiner would like to state that although Rensch does not disclose that his tower is used for a wind turbine, this is merely an intended use and adds no structural features to the claims. Therefore, since Rensch's device comprises all of the claimed limitations, it is inherently capable of performing the same functions as applicant's device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (2006/0272244).

In regard to claims 3, 17, and 18, Jensen discloses the claimed invention, wherein each of the prefabricated metal wall parts has a height and a width. Jensen does not specifically disclose that at least two of the prefabricated metal wall parts have a height which is at least about 2.5 times larger than the width of the bottom edge, more than five times larger than the bottom edge, or more than 10 times larger than the width of the bottom edge. However, Jensen does teach that by increasing the diameter of the tower, the strength will also increase [0009]. He also discloses that larger lengths can be established by welding shell segments together [0026]. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the sections within the above ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Further, by making the tower sections longer, fewer sections will need to be put in place. This will facilitate a speedy assembly of the structure.

Claims 8, 9, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (2006/0272244) in view of Rensch (3,374,593).

In regard to claim 8 Jensen discloses the claimed invention except for specifically disclosing that the essentially quadrangular portion is essentially flat. Rensch teaches

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that it is known to provide a column comprised of metal sections having a quadrangular portion that is essentially flat, figure 2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make Jensen's quadrangular portion flat instead of curved, because the flat surfaces will allow the pole to have a different shape. Also, it would be easier to attach any cross arms or supports to a flat surface as opposed to a rounded surface.

In regard to claim 9, Jensen discloses the claimed invention except for specifically disclosing that the first and/or second flanges are provided with an additional first flange or second flange. Rensch teaches that it is known to provide a flange with a first/second flange 20 and an additional first/second flange 21, figure 8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Jensen's flange(s) with additional flanges, because as taught by Rensch, the additional flanges will reinforce the flanges, column 6, lines 64-65.

In regard to claim 13, Jensen discloses the claimed invention, wherein the circumference of the tower consists of n adjacently positioned prefabricated metal wall parts. Jensen does not specifically disclose that the angle between the first and second flange is $360/n$. Rensch teaches that it is known to provide a column with metal parts having first and second flanges, wherein the angle between the flanges is $360/n$, column 5, lines 7-12, i.e. $360/6$ sides is 60 degrees. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to angle the flanges of Jensen's invention as taught by Rensch, because by having them at the angle of $360/n$ the flanges will mate in a flush manner. If the flanges were

oriented perpendicular to the quadrangular portion, there would be a larger gap between the flanges near the outer face of the panels.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (2006/0272244) in view of applicant's specification.

In regard to claim 10, Jensen discloses the claimed invention except for specifically disclosing that the first and/or second flanges are at least partially folded back towards the inwardly facing surface of the essentially quadrangular portion of the prefabricated wall part for at least partly doubling the thickness of the first and/or second flanges. However, applicant admits in the specification at page 6, lines 5-7 that "This doubling of the flanges causes an additional stiffening of the construction. It will be clear to the skilled person that the flange could be folded back twice or more contributing to the stiffening effect." Thus, the examiner contends that the applicant's disclosure admits that one having ordinary skill in the art would know to double the flanges in order to increase their stiffness. Therefore, the examiner contends that it would have been obvious to one having ordinary skill in the art to double over Jensen's flanges in order to increase the stiffness of said flanges. Further, the examiner takes Official Notice that such doubling over of flanges is notoriously well known in the flange stiffening art.

Claims 12 and 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (2006/0272244) in view of Kleine et al. (4,248,025).

In regard to claims 12 and 23, Jensen discloses the claimed invention, but does not specifically disclose that the first flange of the at least one said prefabricated metal

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wall part is vertically staggeredly attached to the second flange of an adjacent said prefabricated metal wall part by fastening means or that more than half of the adjacently positioned prefabricated metal wall parts are attached vertically staggeredly. Kleine teaches that it is known to vertically stagger metal panel sections of a metal column (see 26, 27 in figures 2-4). It would have been obvious to vertically stagger the sections 3 of Jensen's invention, because by staggering the sections with respect to each other, the horizontal joints will not be in a line. The joints will be staggered and produce a stronger column. This is taught by Kleine at column 3, lines 32-47.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (2006/0272244) in view of Milliken (D21074)

In regard to claim 21, Jensen discloses the claimed invention except for specifically disclosing that the essentially quadrangular portion is essentially flat and wherein the essentially quadrangular portion of the respective prefabricated metal wall part also comprises at least one kink essentially in the direction between the bottom edge and the top edge of the prefabricated metal wall part. Milliken teaches that it is known to provide a metal column comprised of wall parts having a flat quadrangular portion with at least one kink therein (see figure). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make Jensen's quadrangular portion flat instead of curved, because the flat surfaces will allow the pole to have a different shape. Also, it would be easier to attach any cross arms or supports to a flat surface as opposed to a rounded surface. Further, it is also known by those of

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ordinary skill in the art that providing a kink in a thin metal panel is a way of strengthening said panel. The kink makes the panel more rigid and less likely to bend.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jensen (2006/0272244) in view of Silber (2005/0166521).

In regard to claims 24 and 25, Jensen discloses the claimed invention except for specifically disclosing that the tower is provided with stiffening means comprising one or more substantially horizontal stiffening rings. Silber teaches that it is known to provide stiffening rings 51-54 in a tower construction. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate stiffening rings into Jensen's invention, because the stiffening rings will help to make the overall structure more rigid.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See list of references on PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN E. GLESSNER whose telephone number is (571)272-6754. The examiner can normally be reached on Monday through Wednesday and Friday 6:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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